30. In the previous report it was said that the key to the development of the natural resources of Rodrigues was the appointment of a qualified and experienced Agricultural Officer. An officer with the necessary experience and enthusiasm has now been recruited.

31. The new proposals, which will involve considerable expenditure, are designed as far as possible to ensure almost complete self-sufficiency in food for these isolated islanders at the present level of population. The control of erosion, the utilisation of manure and fertilisers, and the keeping of livestock on the unit farms rather than by ranching in the coastal area, form part of the new programme which also makes ample provision for the conservation of water by holding as much as possible of the run-off.

32. *Decortication of " aloes ".*—Continuation and development of the " aloe " fibre industry poses a number of technical problems. The fibre has hitherto been derived almost entirely from wild plants, and the problems connected with plantation production are being studied at the new Richelieu Station, while the problems of efficient decortication of the leaves are being studied by the Engineering Division of the Department of Agriculture. A number of types of decorticator are in use and the industrial loss, output and other characteristics of each of these machines have been studied. As a result of these sudies modifications have been made to increase their efficiency. The Robey prototype decorticator in spite of modifications has not come up to expectations and the effort—after numerous trials – has been diverted to improving the feeding system of an ordinary raspador. Although still in the experimental stage, the new feeder shows considerable promise of being capable of speeding up decortication six times with the great additional advantage of replacing skilled workers with ordinary unskilled labour.

33. *Animal Husbandry.*—The fresh milk supply of the island is derived from some 33,000 cattle, mainly of the so-called " Creole " breed. The cows, which are kept singly or in small numbers by Indo-Mauritian peasants, are stall-fed on fodder collected from estates, Crown Lands, roadsides and wherever else it can be obtained. Milk yields are low, much below the potential of the animal, owing to inadequate feed and poor standards of husbandry. It has, however, been established that the best types of Creole, under suitable management, have milk yields as good as can be obtained from Friesian cows under local conditions.

34. The Animal Husbandry Extension Service, which was started towards the end of 1951 with the object of helping the cow-keeper to improve both the quantity and quality of his milk output, has proved to be one of the most successful achievements of the Development Plan.

35. The service was started in the south and extended as rapidly as recruitment and training of staff would allow. The whole island is now covered with the exception of one district in the north. Cow keepers have made very full use of the Livestock Officers and Livestock Assistants, so far mainly for the treatment of diseases and injuries, including enucleation of ovarian cysts, which cause a high sterility rate among stabled cows, and for artificial insemination of milk cows. Some progress towards better feeding, housing and care has also been made, but this is necessarily a slow and gradual process. The service assists with the distribution among cow keepers of food concentrates prepared and sold by the Agricultural Department.

36. Investigational work has included a historical and ecological study of the "Creole" cow, feeding experiments designed to test its milk potential, and preliminary research into the adaptability to local conditions of the Friesian and its crosses with the " Creole ".

At the Stock Breeding Centre, a herd of " Creole " milk cows is being built up, to be used for selective breeding. Practical field tests have shown that animals of the Creole milk breed are sufficiently tolerant to heat to withstand and produce milk economically under the climatic conditions at Palmar during the hot months.

37. New breeds of stock have been introduced for trial: Ongole cattle from India, intended for the improvement of estate herds, Anglo-Nubian milk goats from England and Dorsian sheep from South Africa. All of these are doing well at the Stock Breeding Centre though there were serious losses from *Oestrus ovis* among the sheep during the summer of 1952-53.

38. A scheme for the improvement of village poultry by the exchange of ordinary cockerels for White Leghorn cockerels has been initiated with the object of improving the local breed, especially with regard to egg production. The assistance given by Government to small producers has not so far met with the success expected. Newcastle disease reached Mauritius in 1953 and it was feared it would interfere seriously with the scheme. However, the disease has been brought under control and preventive vaccination is now current practice. Steps were taken to identify the strains of the virus and a suitable vaccine was developed and is available to all poultry keepers.

39. Experiments in the production of fodder have been transferred to the Agricultural Division where, at the time of writing, a qualified officer of the rank of Senior Agricultural Officer is now in charge of all grassland improvement work. In addition to the improvement of grass, attempts are being made to treat it as a crop. The grasses which so far appear most likely to give useful results are *Setaria* spp. and Molasses grass. In the water districts Setaria and Elephant grass are showing considerable promise.

40. *Land Settlement.*—Three areas are being developed under the Pilot Land Settlement Schemes : Petit Sable, Terre Rouge and Richelieu. Of these, the first is the most advanced. By the end of June 1953, it was occupied, fully cropped and complete except for some of the buildings on the equipped holdings. It is now in complete working order.

41. There are three types of holdings in each scheme, designed to meet the needs and resources of different classes of cultivators ; equipped holdings, with dwelling house and cow-shed, 4 to 5 acres in extent; bare land holdings, generally 2 acres but ranging from 1 to 4 ; allotments of ¼ to ½ of an acre. The holdings are run on a mixed farming system, the crops being sugarcane, vegetables and other food crops, and the livestock mainly cows, goats and poultry. Only vegetables and other foodcrops may be grown on allotments. Economic rentals are charged for holdings and allotments.

42. At Petit Sable there are 10 equipped holdings, 10 residential holdings, 42 allotments and, in addition, 100 onion plots, since this crop is well suited to the region and is very remunerative. A considerable part of the area is too steep for cultivation and is being placed under protective cover which will afford fodder for the settlers' livestock.

43. At Terre Rouge, 20 equipped holdings and 83 bare-land holdings are available. The settlement is now in total occupation, but shortage of water in the dry season has hitherto been a serious handicap. The main irrigation supply canal has now been completed and the distributory system surveyed and mapped down.

44. At Richelieu, another dry region where irrigation water is, however, already available, work has been held up owing to difficulties beyond the control of the Agricultural Department. These difficulties have now disappeared and the scheme is in full working order. It consists of 10 equipped holdings and 10 bare land holdings.

45. The initiation and development of these schemes required a great deal of preliminary work : acquisition and survey of land ; preparation of land, involving at Terre Rouge removal of an enormous mass of overlying rock ; anti-erosion works, construction of roads, culverts and bridges ; provision of domestic and irrigation water and buildings ; selection of settlers. It must be noted that the schemes are experimental. The primary object is to foster the establishment of a useful and contented food producing community by providing security of tenure, essential amenities and guidance. It has been found necessary to allow tenants of holdings to cultivate sugarcane on part of the land in order to provide a cash crop which is at the moment particularly remunerative.

46. An experimental dairy small holding scheme on Crown Land at Palmar, consisting of 10 holdings each of 12 acres designed to support at first four and later six dairy cows has been also been started, but its economics are suspect.

47. *Tea.*—Much of the undeveloped or underdeveloped land remaining in Mauritius is in the wet upland region where conditions are unsuitable for cultivation of sugarcane. This region is well suited to the production of tea and it is Government's policy to develop as fully as possible on an economic and efficient basis the production of tea in Mauritius.

48. One of the first difficulties was to obtain seed. An area of old tea was therefore cleared and regenerated to yield seed and later a seed-bearer plantation was established with seed obtained from Malaya. The outbreak of blister blight in Malaya closed this source but eventually further supplies of seed were obtained from Nyasaland.

49. Work on the Tea Experiment Station started in 1949 and in the 1949-50 season 15 acres were cleared, drained and planted. By June 1955, the area had been extended to 70 acres planted, and the first-planted tea had come into bearing at 2½ years from planting. Yields to date have been satisfactory; one field yielding over 1.265 lbs of made tea with fine plucking in its 5th year from seed, a striking contrast to the island's average yield of 665 lbs per acre for mature tea in 1955.

50. The prospect of such yields prompted the Midlands plantation scheme, the future of which is now up for reconsideration in view of the interest which both local and UK interests are showing in the development of the tea industry. By June 1955, the area planted at Midlands, originally planned at 500 acres, had reached 200 with 50 acres in bearing. Housing for 12 labourers' families and one Overseer have been provided and more accommodation has been planned to keep pace with the development of the planted area.

51. *Entomological Work.*—One of the most successful of the completed projects has been the biological control of the introduced weed *Cordia Macrostachya* a bush which had spread over much of the wild fibre and grassland area of the island and into the sugarcane lands. The plant has not been eliminated but its destruction by biological means has reduced weeding costs considerably. The results have been an increase in fibre supplies, more fodder for dairy cattle, and elimination of the annual costs of controlling the pest on sugar estates: economic results which fully justify the relatively small total expenditure of about Rs 84,000. The work was carried out by the Entomological Division of the Department in collaboration with the West Indies Station of the Commonwealth Institute of Biological Control.

52. Parasites for the Spotted Borer of Sugarcane have been introduced from the West Indies, but so far without success. Recently, parasites for this species and the Pink Borer have been introduced from New Guinea but it is too early to assess results. A parasite of the Pink Borer obtained from East Africa has become established and is now very common and well distributed.

53. *Stethorus sp.* has been introduced for control of the Red Mite, which is now a serious pest of tomatoes and some other vegetables, but assessment of the results has not yet been completed.

54. Pigeon Pea grows well in Mauritius but produces little seed because of the attack of a number of insects, of which two species of Pod Borer are the most important. Because of the potential value of the plant as a food crop, parasites of the Pod Borers have been introduced from the West Indies. Although only recently released, one of them is already established.

55. A beetle predator (Pachylister) of the house fly has also been introduced, but does not look promising.

56. *Fisheries.*—Local supplies of fresh fish, averaging about 2,000 tons a year, come mainly from the 90 square miles or so of lagoon within the coral reefs. The lagoons are believed to be fished to their maximum capacity for sustained yield, and any increase of supplies depends on the development of deep-sea fishing in coastal waters outside the reef. For this, large pinnaces are required, preferably with diesel engines.

57. The powered pinnaces already operating obtained good catches and a number of owners were anxious to purchase diesel engines for which most of them lacked the means.

58. A scheme was therefore devised, and financed from the Development and Welfare funds, to provide loans for the purchase of marine diesel engines to owners of pinnaces of suitable size and design. By June 30, 1955, five loans totalling Rs 76,000 had been made.

59. The proposed survey of local fishing banks by means of echo-sounding equipment has not been carried out, but a private fisherman has acquired an echo sounder.

60. Experiments with fish acclimatization and culture, initiated with the cooperation of the Forest Department, have now been taken over by the Agricultural Division in view of certain facilities already available in the division. There are now four ponds at Five Ways and five at Curepipe Experiment Station and preliminary results are awaited.

61. *Forestry.*—The forestry programme for the replanting of 8,000 acres of the Crown Forest Estate was initiated in 1948. Until 1951 the cost of replanting was entirely financed from funds provided for silviculture under the ordinary budget of the Colony, but when the Development Plan was reviewed in 1950 provision of Rs 750,000 from loan funds was included in the Plan to assist the forestry replanting programme.

62. This provision was increased to Rs 1,683,333 in June, 1953, when a grant of £70,000 was made from the Colonial Development and Welfare Central Reserve for the development of the Crown Forest Estate to meet approximately 70/161 of the programme of afforestation over a period of six years.

63. On June 30, 1955, 448.6 acres of forest land had been replanted at a total cost of Rs 1,216,364 of which Rs 687,508 were provided from the General Revenue of the Colony and Rs 528,856 from funds made available under the Development Plan. This expenditure includes the cost of the establishment of new plantations, the creation of nurseries, and the construction of access roads.

HEALTH

64. *Control of Malaria.*—The outstanding achievement of the Development and Welfare Plan has been the virtual eradication of Malaria from Mauritius.

65. Anti-malarial measures have been carried out in the island since the beginning of the century. Failure to achieve success was mainly due to the following short-comings: recommendations made by experts—the names of Ross, Andrew Balfour and Malcom Mac Gregor should be mentioned here—were only partially accepted, the creation of a suitable organization was long deferred, accepted policy was not adhered to and works executed were not pressed to a conclusion.

66. In June, 1943, the services of Mr. C. R. Harrison, a Fellow of the Ross Institute, were made available under Colonial Development and Welfare Scheme D 285. The object of Mr. Harrison's visit was to make a survey of the Colony from the point of view of anti-malaria engineering, to advise on the nature of engineering works which would have to be carried out in connection with any project for the suppression or radical control of malaria in Mauritius, and to draw up plans and estimates for such works. Mr. Harrison arrived in Mauritius in September, 1943, and left in June, 1944. With his assistance, a comprehensive scheme was drawn up by the Director of Medical Services. The original estimated cost of the scheme was £1,500,000 i.e. Rs 20,000,000. At that time, although D.D.T. was still in its infancy, research was in progress and it was foreseen that the use of insecticides in combatting the vectors of malaria might revolutionise the technique of malaria eradication. The wisdom of large expenditure on engineering works was therefore doubtful. A reduced, initial provision of Rs 5,000,000 was made in the Development and Welfare Plan, and major works were started in 1946. The cost of these works was financed entirely from a grant under the Colonial Development and Welfare Scheme D 746.

67. At the same time a small scale experiment in the use of D.D.T. by residual spraying for the control of malaria over an area of 16 square miles in the Black River district was started in June, 1946. The results of the initial experiment were promising and the control of malaria by means of D.D.T. was extended to the Grand Port district in 1947-48. While this further experiment on a larger scale was being carried out, the Director of Medical Services, who was on leave in the United Kingdom in 1947, was invited to attend a meeting of the Colonial Insecticides Committee at which he gave a detailed account of the malaria problem in Mauritius. As a result a new provisional scheme of malaria eradication was drawn up. The cost of labour, field equipment, insecticides and the general operation of the scheme was met by local funds, but an equipped research team was furnished by the Colonial Insecticides Committee, the cost being borne by Colonial Development and Welfare Research funds. This provisional arrangement was later revised: all the expenses of the research team and one fifth of other expenses were financed under Colonial Development and Welfare Scheme R 227—the total contribution under the research scheme not to exceed £111,880 i.e. nearly Rs 1½ million. The scheme was completed in 1953.

68. At the same time, major drainage and canalisation works, were carried out at strategic points in order to destroy mosquito breeding places.

69. By the end of the financial year 1952–53 it was considered that malaria was virtually eradicated. The Development and Welfare anti-malaria schemes were therefore closed, and recurrent expenses for maintenance were transferred to the ordinary budget of the Colony. Further entomological research work is, however, being carried out and financed from a free grant of £16,252 (Rs 216,700) under a new Colonial Development and Welfare Research Scheme No. R 543.

70. An indication of the results achieved is given in the statistical table below regarding malaria cases treated in hospitals.

Year		*Cases of malaria treated in hospital*	*Deaths in hospital*	*Case Mortality %*
1945	...	3,244	148	4·57
1946	...	2,522	106	4·20
1947	...	1,989	76	3·82
1948	...	1,576	66	4·19
1949	...	804	43	5·35
1950	...	209	10	4·78
1951	...	98	4	4·08
1932	...	3	Nil	Nil
1953	...	Nil	Nil	Nil
1954	...	3	Nil	Nil

71. As stated in paragraph 66, the original estimated cost of anti-malaria works was Rs 20,000,000. The actual total expenditure which had been incurred by June 30, 1955, was as follows :—

		Rs	c
Engineering Works	...	5,351,311	95
Insecticidal Works	...	6,012,018	48
TOTAL	...	11,363,330	43

72. *Hospital Facilities*—The contribution of the Development Plan to the improvement of health services has also included a building programme. The following buildings have been completed or are under construction :—

(1) Extension of the Civil Hospital, Port Louis, including 3 wards, a dental clinic and staff quarters ;

(2) Extension of the Mental Hospital, Beau Bassin, including 2 new wards and a female section ;

(3) 4 new Maternity and Child Welfare Centres, of which 2 have been built by Government, and 2 by the Maternity and Child Welfare Society with the assistance of Government grants.

(4) A new Dental Clinic at Victoria Hospital ;

(5) A new Orthopædic Hospital at Candos in the vicinity of Victoria Hospital to replace temporary accommodation at Floreal. The hospital includes 6 wards, a deep X-Ray department, an operating theatre, an Out Patients department, an administrative block and the usual ancillaries.

(6) A Nurses Home at Candos for nurses under training.

PUBLIC WORKS

73. The achievements of a development programme are not always conspicuous. As stated elsewhere in this report, investigation and research in agriculture do not always give rapid results but may be expected to yield long term dividends. In another field of work—for example, the eradication of malaria—it is sometimes difficult to grasp fully the change which has taken place and assess the economic results. Those responsible for public works should be able to say "*Si monumentum requiris, circumspice*", but the works may not be noticed by the general public because they are often sited out of the way and so do not force themselves on the attention. The following review may help to produce a better understanding of the progress made.

WATER SUPPLIES

74. *The Mare-aux-Vacoas—Mare Long—Tamarin Falls—Magenta—La Ferme Scheme.*—This scheme is the combination and continuation of several schemes, some of which were implemented before the drawing up of the Development and Welfare Ten-Year Plan. The object is to make the best possible use of the water resources of several catchment areas, taking into account the requirements of the Colony for water for domestic use, for irrigation and for electric power.

75. The Mare-aux-Vacoas reservoir was originally constructed to provide water for domestic purposes. Later it was realised that the storage capacity of the reservoir could be extended so as to supply water for irrigation and hydro-electric purposes as well. In 1942, on the recommendation of Mr F. H. Hutchinson, I.S.E., Consulting Engineer, works were carried out to increase the storage capacity of of the reservoir from 260 to 597 millions gallons. All water in excess of domestic requirements was to be used for irrigation and hydro-electric purposes.

76. The La Ferme Reservoir had been constructed in 1915–1918, on the recommendation of Mr G. M. Harriott, C.S.I., C.I.F., V.D., M.I.C.E., Consulting Engineer. The scheme comprised a storage reservoir of 416,000,000 cubic feet; two feeder canals, one derived from Mesnil and Plaines Wilhems Rivers and the other from Papayes and Rempart Rivers, the latter receiving surplus waters from the Mare-aux-Vacoas Reservoir; and distributary canals, 26 miles long, which take water to an area of about 2,500 acres in the Black River district.

77. Further investigation pointed to the possibility of constructing a storage reservoir at Mare Longue and another above the Tamarin Falls. As the Mare Longue Reservoir was situated at a higher level than the Mare-aux-Vacoas Reservoir, it seemed possible to link these two reservoirs.

78. The Development Ten-Year Plan accordingly provided for:

(1) The construction of a feeder canal from Les Mares to Mare-aux-Vacoas to increase the water supply of the reservoir.

(2) The construction of a new reservoir at Mare Longue (220,000,000 cubic feet capacity).

(3) The construction of another new reservoir at Tamarin Falls (45,000,000 cubic feet capacity).

(4) The construction of an irrigation distributary canal from the Tamarin River, below the Tamarin Falls, to Black River District.

(5) The lining with cement of the feeder and distributary canals of the La Ferme reservoir.

79. The ultimate object in view is that the water from the catchment areas of the various storage reservoirs should be used for irrigation purposes after having been used for the production of electricity at the power station of the General Electric Supply Company Limited, at Tamarin Falls. The average annual water supply thus made available is as follows:—

	Million cu. ft.
(1) From Mare-aux-Vacoas reservoir (surplus water available after making provision for an adequate domestic water supply)	450
(2) From Mare Longue catchment area	450
(3) From Tamarin Falls catchment area	600
TOTAL	1,500

80. With the whole of this water available for the production of electricity at Tamarin Falls—an excellent site for a power station, with a fall of 960 feet—the General Electric Supply Company Limited can now produce an average of 25,000,000 K.W.H. units per annum. Below the Tamarin Falls power station after deduction for riparian rights along the Tamarin River, 1,260 million cubic feet per annum are available for the irrigation of about 2,700 acres of land, of which about 1,200 acres is land not at present irrigated by the La Ferme reservoir.

81. Progress made during the period 1946-55 is as follows :—

(1) *Les Mares feeder canal*—deferred.

(2) *Mare Longue reservoir*—construction was started in July, 1946, and completed in August, 1949. The construction of the proposed conduit from Mare Longue to Mare-aux-Vacoas, which is not essential has been abandoned.

(3) *Tamarin Falls reservoir.*—This reservoir has been constructed by the General Electric Supply Company Limited and the proposed original capacity increased to 72 million cubic feet. It was completed in 1951.

(4) *Magenta irrigation canal.*—The preliminary works on the dam on the Tamarin River, at the head of the irrigation canal, were started in December, 1948. The dam was completed in April, 1950. The canal, sixteen miles long was completed and in operation by July, 1954. It has been necessary to line the canal with cement rendering and this has been done on a length of 16,500 feet.

(5) *La Ferme irrigation system.*—The bed of the feeder canal from Plaines Wilhems River to La Ferme reservoir has been lined with concrete on a length of 13,870 feet and sides lined with stones on 14,980 feet. Three reinforced concrete bridges were built over this canal. The bed of the main distributary channel from the reservoir was levelled and concreted on a length of 28,400 feet and the sides lined with concrete or masonry on a length of 14,925 feet. Minor distributaries have had beds concreted on 4,475 feet and sides lined with masonry on 24,925 feet.

DOMESTIC WATER SUPPLY SCHEMES

82. *The Mare-aux-Vacoas extension scheme.*—This scheme provides for the extension of the existing Mare-aux-Vacoas domestic water supply system and the supply of water to additional areas, such as the Black River District—a total increase in supply from 4,800,000 to 8,800,000 gallons per day.

83. Progress made: the main concrete conduit from the Mare-aux-Vacoas reservoir—capable of carrying 8,800,000 gallons per day—has been extended and repaired. The inadequate power mains leading from the conduit to the La Marie filter beds have been replaced by two 18-inch bitumen lined steel pipes. Four new slow sand filters with an area of 33,472 square feet were completed and a fifth was in hand.

Construction of service reservoirs progressed as follows :—

Service Reservoir	*Capacity*	*Date of completion*
La Marie Pure Water Tank No. 3 ...	500,000	1952
Trou aux Cerfs	500,000	1953
16th mile	50,000	1953
Nouvelle France	140,000	1955
Vacoas	500,000	1955
Rose-Hill	500,000	Started
Mesnil	50,000	1955
Camp Fouqueraux	150.000	1953
Alma	150,000	1953
Crève Cœur	40.000	1955

84. Water mains consisting of 21", 16", 12", 10" and 9" were laid from La Marie filter beds to Alma in the district of Moka, to Vacoas, Candos, Rose Hill and La Brasserie in the district of Plaines Wilhems. New electrically driven pumps of 850 gallons per minute capacity were put in operation in 1953 at La Marie to pump water into Trou aux Cerfs reservoir, which serves the Curepipe area. Work was started on the foundation of the new pumping station to house hydraulically driven centrifugal pumps to pump water to the same area.

85. *Black River water supply.*—The Mare-aux-Vacoas domestic water supply has been extended to Bambous Village, Médine, Clarens and Flic en Flac by the laying of a new pipe line from La Marie to Bambous via Bassin and Beaux Songes. The pipe line has thence been extended to Flic en Flac. Extension of the supply to Tamarin and Black River has been completed. Bon Asile service reservoir of 60,000 gallons and Yemen reservoir of 40,000 gallons were completed and all pipe lines up to Black River Village.

86. *The Piton du Milieu scheme.*—The object of this scheme is to provide filtered and chlorinated water to localities situated in the North, East and South of the Island, in the districts of Pamplemousses, Rivière du Rempart, Grand Port, Savanne and part of Moka, where the water supplies, derived from many sources, are lacking both in quality and quantity. The present supply varies from 5 to 15 gallons per head per day, and a supply of 27 to 30 gallons per head per day is aimed at in the new scheme. The programme comprises the following works :—

(1) a storage reservoir at Piton du Milieu to hold 110 million cubic feet, i.e. 685 million gallons ;

(2) filter beds for treatment of 4 million gallons per day ;

(3) 3 main trunk lines : 22,500 feet of 18 inch pipes
27,000 „ 15 „
34,000 „ 12 „

87. The Pamplemousses and Rivière du Rempart water supply system provides for filter beds for the treatment of 900,000 gallons per day ; 7 service reservoirs of a total capacity of 1,500,000 gallons ; and 66 miles of pipe lines of different sizes varying from 8 to 3 inches. The Flacq water supply system provides for 9 service reservoirs of a total capacity of 1,450,000 gallons, the laying of 39½ miles of new pipe lines of sizes varying from 12 to 3 inches, and the relaying of 44 miles of pipes. The Grand Port—Savanne water supply system provides for 8 service reservoirs of a total capacity of 1,600,000 gallons, the laying of 33½ miles of new pipe lines of sizes varying from 10 to 3 inches, and the relaying of 23 miles of pipes.

88. Progress made :—

(1) The construction of the Piton du Milieu reservoir was started in September, 1949, and completed in March, 1954.

Piton du Milieu Filters.—Works for a 4 million gallons per day rapid gravity filtration plant was started in 1954. Excavation for the clear water tank, sedimentation tank and chemical house was completed.

(2) Trunk mains : The trunk main 23,000 feet long and consisting of 18″ diameter bitumen-lined steel pipes has been laid from Piton du Milieu Reservoir to Quartier Militaire. This main is to serve the districts of Flacq, Pamplemousses, Riviere du Rempart and part of Moka. A 15″ main from Piton du Milieu to Cluny—which is to serve the districts of Grand Port and Savanne—was laid on a length of 5.5 miles. The pipes for the 12″ main at Quartier Militaire to Salazie, which is to serve the districts of Pamplemousses and Rivière du Rempart have been received and laying was started in June 1955. This main will consist of asbestos-cement pressure pipes.

(3) Pamplemousses and Rivière du Rempart water supply system : 2 new service reservoirs of 450,000 gallons have been completed and are in operation. A length of 49.8 miles of distribution pipes varying from 9″ to 3″ diameter were laid and in addition about 2 miles of minor distributaries of 2½″ to 1″ diameter were laid making a total of 51.8 miles.

(4) Flacq water supply system : Pending the completion of Piton du Milieu reservoir and filters extensive pipe laying works were done to meet the acute need for improved supplies. 42.7 miles of existing pipes 7″ to 3″ in diameter have been cleaned, painted and relaid. 32.4 miles of new mains 12″ to 3″ diameter were laid. 6 service reservoirs of a total capacity of 1,020,000 gallons were constructed.

(5) Grand Port—Savanne water supply system : Interim measures similar to those in the Flacq District have been taken in the Grand Port—Savanne Districts. A total length of 18.4 miles of service pipes has been laid. In addition about 8 miles of service mains—of sizes varying from 5 to 3 inches—were purchased from the Admiralty in 1946 for the supply of water to a region of the Grand Port District which previously was without piped water. The construction of six service reservoirs of 864,000 gallons total capacity has been completed at Nouvelle France, Bemanique, Eau Bleue, Riche en Eau, Rose Belle and Rampe Le Noir.

HYDRO-ELECTRIC AND IRRIGATION DEVELOPMENT PROJECTS

89. *Midlands-La Nicolière scheme.*—This scheme had its origin in Mr Harriott's 1914 report. As adopted it consisted of :—

(1) a storage reservoir at Midlands to hold 702,000,000 cubic feet ;

(2) a feeder channel from Midlands to La Nicolière 17 miles long to carry 240 cubic feet per second ;

(3) a storage reservoir at La Nicolière to hold 204,000,000 cubic feet ;

(4) a main distributary and subsidiary channel system to irrigate 20,000 acres in the north of the Island.

When the work was stopped in accordance with the recommendations of the Financial Commissioners in 1931, (2) and (3) had been completed, together with about 10 miles of distributory channels and a small amount of earth work on the Midlands dam. Mr Hutchinson in his 1939 report recommended the completion of the Midlands dam, but with a reduced height to give a storage capacity of 550,000,000 cubic feet only, the lining of the feeder channel with concrete to stop losses of water ; the restriction of irrigation to an area of 9,540 acres and the diversion of the route of the main distributory from La Nicolière to generate power over a 300 feet fall at Australia. Work could not then be put in hand, and when the Ten-Year Plan was drawn up, only the lining of the La Nicolière feeder canal was included, at an estimated cost of Rs 419,000 pending further investigation of the remainder of the project. When the Development Plan was reviewed in 1950, provision of Rs 7,000,000 was made to meet the estimated cost of the Midlands reservoir, irrigation canals and a power station at Australia. An engineering firm was subsequently commissioned to prepare plans, specifications and detailed estimates of the cost of the Midlands reservoir. The detailed estimates are much higher than forecast and it appears unlikely that the Scheme can be economic.

90. The lining of the feeder canal from Midlands to La Nicolière reservoir has been completed. An irrigation canal about 4 miles long from the Bathurst dam on the Calebasse River to the Terre Rouge area has been built. The Canal will provide 150 million cubic feet of irrigation water per annum to the Terre Rouge Land Settlement scheme.

91. *Eau Bleue Hydro-Electric scheme.*—This project is recommended in Sir Bede Clifford's work "The Irrigation and Hydro-Electric Resources of Mauritius". It involves the construction of a storage reservoir of 220 million cubic feet on the Eau Bleue River on the western side of a spur of Lagrave Mountain and the installation of a peak load power station of 4,000 K.W. capacity on the eastern side of the spur, about 600 feet below the reservoir site. It was calculated that the reservoir, situated in a catchment area of about 8.7 square miles with an average rainfall of 175 inches per annum, should be capable of yielding 24 to 27 cubic feet per second, and that the firm output of the power station would be about 8¾million K.W.H. per annum.

92. When the Development Plan was reviewed in 1950, provision of Rs 3,000,000 was made to meet the estimated cost of the reservoir and the power station.

93. Gauging tests were carried out from 1952 to date to check the estimated water yield of the catchment area. These tests have shown that the average annual yield is less than was originally estimated, and the discrepancy is attributed to underground losses in the catchment area outside the site selected for the reservoir. It is now estimated that the Eau Bleue river can yield enough water to produce an average output of 5½ million K.W.H. per annumn. The revised estimated cost of the scheme is Rs 4.3 million.

94. It would be possible, however, to increase the yield of the reservoir by the construction of 2 feeder canals from Rivière Citron, which is about 6 miles distant and from Grand River South East which is at about 3 miles from the site of the reservoir. This would raise the average output to about 14.50 million K.W.H. per annum. The estimated cost of the extension scheme is about Rs 1.3 million.

95. The extended scheme has been included in the Development Programme of the Central Electricity Board and execution of the work by the Public Works Department has been authorised and was started in January, 1955. Up to June, 1955 the work done consisted mainly of clearing operations. The dam site was completely cleared of vegetation, works roads to the Borrow areas were constructed and 500 cubic yards were excavated in the cut off trench. On completion the hydro-electric station will be operated by the Central Electricity Board the cost being regarded as a loan to the Board.

96. *Roads.*—The development programme consisted of :—

(1) the improvement of main roads ;

(2) the development of *unproclaimed* branch roads (i.e. roads which are neither main roads nor branch roads in the terms of the definitions in section 2 of the Roads Ordinance (Cap. 427 of the Laws).

(3) the construction of new roads.

Progress has been as follows :—

(1) About 53 miles of main roads, hitherto untarred have been realigned, broadened, resurfaced and tarred.

(2) Approximately 5 miles of unproclaimed branch roads have been widened, resurfaced and made waterbound. Additional funds for the improvement of unproclaimed roads have since been included in the annual general estimates and are now allocated to Districts Councils in the rural areas.

(3) About 15½ miles of new roads have been constructed, of which about 9¼ miles have been tarred. One of these roads links Curepipe, in the Plaines Wilhems district, with Quartier Militaire, in the Moka district. Another, in the Chamarel-Choisy area, links the Black River and the Savanne coast ; the object of this latter road is to provide easy access to an area of over 1,500 acres of cultivable land which is now under agricultural development.

EDUCATION

97. The Development Plan originally included provision for a residential Teacher's Training School at Côte d'Or and for recurrent expenditure in connection with it. The Côte d'Or scheme was abandoned because of objection to residence at the College and on review of the Plan in 1950, the recurrent expenditure was transferred to the General Estimates. The educational section of the Plan has since consisted of C.D. and W. Schemes for the extension of the Beau Bassin Training College, for school buildings, and for scholarships. C.D. and W. scheme No. D. 1766 for school building provided for a C.D. and W. contribution of 75 per cent of the cost not exceeding Rs 15 per square foot up to a maximum of Rs 2,626,000 towards primary school building and a Girls Secondary School, for building loans to private secondary schools, and for a capital grant for a school for the blind.

98. EDUCATION BUILDINGS

Primary Schools.—The progress made in the construction of primary schools and staff quarters is shown in the table below :—

Schools	*Temporary Shelter Class Rooms*	*Permanent Class Rooms*	*Administration rooms*	*Lavatory accommodation*	*Head-Teachers Quarters*	*Servants' Quarters*
Plaine des Papayes	—	9	—	1	—	—
L'Escalier	—	9	—	1	—	—
Quatre Bornes	—	13	—	—	—	—
Crève Coeur	8	5	—	1	1	1
Rivière du Rempart	17	5	2	1	1	—
Rivière des Anguilles ...	4	15	—	1	1	—
Long Mountain	—	17	2	1	1	—
Goodlands	—	16	2	1	1	1
Solférino	—	11	1	1	—	1
Triolet	—	11	1	1	1	1
Piton	—	11	1	1	1	1
Belle Rose	—	16	1	1	—	—
Eastern Suburb	—	11	—	—	—	—
Pamplemousses	—	5	3	1	—	1
Barkly	—	5	—	—	—	—
Grand River South East	—	—	—	—	1	—
Vacoas (Reunion Road)	—	15	2	1	—	1
Labourdonnais Port Louis	—	18	2	1	—	1
Camp des Lascars	—	20	2	1	—	1
	29	212	19	15	8	9

99. The construction of Vacoas School started in April, 1954, Labourdonnais School in November, 1954. The cost of Camp des Lascars School has been met partly under the Development and Welfare Scheme.

100. Handicraft centres are being provided at most of the new schools.

101. *Domestic and Handicraft Centres.*—Specially designed and equipped Class rooms for the teaching of domestic and handicraft subjects have been constructed at:—

Rose Hill	...	2 blocks
Port Louis	...	2 blocks

102. *Teachers' Training College, Beau Bassin.*—The first and major part of the scheme—consisting of class rooms, administration block, common rooms for staff and students, and lavatories – has been completed. The last part, consisting of an assembly hall to seat 400 and a lecture hall to seat 116, was in hand at the end of June 1955.

103. *Secondary School for Girls, Rose Hill.*—A large house with a plot of land of about 9 acres was purchased in 1950 to provide temporary accommodation for the first Government Secondary School for Girls—now, with the gracious permission of Her Majesty, named "The Queen Elizabeth College". The scheme provides for the construction of new buildings. The first part of the project, consisting of a two-storeyed building with 14 class rooms, has been completed. Plans have been made for the construction of an administration block, another block of class rooms for the teaching of science and art, an assembly hall and common rooms.

104. *Scholarships.*– Under the Central £1,000,000 C.D. and W. Scholarship Scheme, which was designed to train local men to fill higher posts in the Colonial Services, Mauritius received an allocation of Rs 373,000. A further Rs 370,000 was provided from the Mauritius allocation for similar scholarships. Both schemes are centrally administered and as at June 30, 1955, a sum of approximately Rs 565,000 had been spent leaving the balance to cover expenditure until completion of the awards. Scholarships have been awarded for the following courses of study:—

Education ...	13	Medical ...	2	Economics ..	1
Social Science ...	7	Legal ...	1	Administration ...	1
Agriculture ...	5	Health ...	1	Forestry ...	1
Engineering ...	3	Librarianship ...	1	Meteorology ...	1
Architecture ...	3	Customs ...	1		

The Education Department has had since 1951 its own scholarship scheme for training Education Officers financed from general revenue and funds have also been voted annually for study courses for officers for all departments on leave.

105. *Housing.*—Provision in the Plan consisted of Rs 10,625,000, of which Rs 10,500,000 was ear-marked for loans to the Municipality of Port Louis and the three Town Councils and Rs 125,000 for an experimental co-operative housing society. On June 30, 1955, Rs 4,893,000 had been lent, allocated as follows:—

	Rs
Municipality of Port Louis	700,000
Town Council of Curepipe	1,084,000
Town Council of Beau Bassin—Rose Hill ...	1,100,000
Town Council of Quatre Bornes	2,000,000
Grand Port – Savanne Co-operative Housing Society	9,000

Loans to the urban local government authorities were made in accordance with approved allocations but the actual amounts drawn reflected the progress made with planning and execution rather than the size of the total allocation.

Details of the Housing Schemes carried out by the Municipality and the Town Councils or in progress on June 30, 1955, are as follows:—

(1) *Port Louis*: The Municipality has completed the Vallonville Scheme at a cost of Rs 276,000 and has completed in part the Monseigneur Leen Avenue and New Cut Street Scheme which is estimated to cost Rs 345,000. The Eastern Suburb Scheme estimated to cost Rs 1,500,000 is still in the Planning Stage and no commitment yet exists.

The Vallonville Scheme comprises 18 Terrace-type houses of 2 rooms each and 6 semi-detached houses of 3 rooms each; Houses of the first type are rented at Rs 50 per month and those of the second type at Rs 75 per month.

The Monseigneur Leen Avenue Scheme comprises 8 houses of 3 rooms each, 32 houses of 2 rooms each and 8 apartments of 1 room each, all of which are of the Terrace-type. The estimated proceeds from rent are Rs 20,640 per annum

(2) *Curepipe.*—The Town Council has completed the *Cité Bonnefin and Cité Raoul Rivet Schemes.* The Cité Lees Scheme was to be completed in December, 1955. The Town Council has an agreement with the *Compagnie Immobilière Mauricienne Ltée.* for the construction of about 100 houses for disposal on hire-purchase terms and a sum of Rs 1,500,000 has been earmarked.

The Cité Bonnefin Scheme comprises 5 blocks of the Terrace-type of one and two room-apartments with a total number of 25 rooms rented at an average of Rs 15 per room per month.

The Cité Raoul Rivet Scheme comprises :—

(a) one block of 2 apartments of 3 rooms each, one block of 1 apartment of 3 rooms and 1 apartment of two rooms—Total: 11 rooms rented at Rs 18 each per month.

(b) 5 blocks of two and three room apartments each—Total: 29 rooms rented at Rs 18 each per month.

(c). 12 blocks of 2 rooms i.e. 24 rooms rented at Rs 7 each per month.

(d) 4 Terrace-type blocks of one and two room units—Total 22 rooms rented at Rs 15 each per month.

(e) 6 blocks of one and two room units—Total 35 rooms rented at Rs 18 each per month,

Cité Lees Scheme comprises 11 blocks of semi detached units of 2 and 3 rooms to be rented at Rs 60 and Rs 90 respectively. The total number of rooms is 50 at an estimated cost of Rs 312,000.

(3) *Quatre Bornes* - The Town Council had completed the *Cité Candos Scheme* at a cost of Rs 1,026,650. *The Antelme Avenue Scheme* was nearing completion and was estimated to cost Rs 315,000. *The Cité Père Laval Scheme* had also started at a total estimated cost of Rs 1,100,000.

The Candos Scheme comprises 24 four-room houses, 24 three-room houses, 24 two-room houses (semi-detached). Houses of the first type are rented at Rs 100 per month, those of the second type at Rs 75 per month and those of the third at Rs 35 per month.

The Antelme Avenue Scheme comprises 36 semi-detached two-room houses. The proceeds of rent are estimated at Rs 40 per month for each house and the annual income will amount to about Rs 17,280 representing approximately 5.4 per cent of the capital outlay.

The Cité Père Laval Scheme comprises :—

24 blocks of semi-detached two-room units, 28 blocks Terrace-type including 92 two-room units and 24 one-room units.

The scheme will house 116 families.

(4) *Rose Hill*—The Town Council had in hand the Plaisance Scheme (expected to be completed by the end of November, 1955) and the de Rosnay Scheme at an estimated total cost of Rs 750,000 and Rs 1,500,000 respectively, while it has spent Rs 100,030 on land, etc., for a further scheme at Vuillemin, which has not yet been fully planned or approved by Government.

The Plaisance Scheme comprises 12 detached houses of 2 room units, 24 semi-detached houses of 2 room units and 8 blocks of 3 rooms. The detached houses are rented at Rs 40 per month each, the semi-detached at Rs 35 per month each and the rooms at Rs 17 per month each.

The de Rosnay Scheme comprises 100 houses as follows :—

15—2 room units
42—4 room units
43—5 room units

The construction of 9 houses viz., 2 of the first type; 4 of the second type and 3 of the third type is nearing completion. Land has been purchased for the Vuillemin Scheme at a cost of Rs 90,000 approximately but no definite scheme has yet been planned.

FINANCIAL SECRETARY'S OFFICE
THE SECRETARIAT
PORT LOUIS.

JUNE 1, 1956.

APPENDIX I

ANALYSIS OF TOTAL EXPENDITURE ON JUNE 30, 1955

	Actual Total Expenditure		*Government Expenditure*		*Re-lent*	
	Rs	c	Rs	c	Rs	c
(1) *Social Services*						
Education	6,751,708	18	6,151,708	18	600,000	00
Health	15,617,671	35	15,617,671	35	—	
Housing	5,236,957	36	343,957	36	4,893,000	00
Sewerage	596,905	05	596,905	05	—	
TOTAL—SOCIAL SERVICES	28,203,241	94	22,710,241	94	5,493,000	00
(2) *Economic Development & Basic Services*						
Agriculture including Fisheries Research ...	13,017,317	30	7,288,409	30	5,728,908	00
Forestry	1,221,499	33	1,221,499	33	—	
Secondary Industries	5,282,703	64	364,667	77	4,918,035	87
Water Supplies :—						
(*a*) Irrigation and Hydro-Electric ...	6,528,501	34	6,528,501	34	—	
(*b*) Domestic	22,344,517	47	21,519,517	47	825,000	00
Roads	3,326,185	19	3,326,185	19	—	
Town Planning	159,614	87	159,614	87	—	
Aeronautical	164,782	03	164,782	03	—	
TOTAL ECONOMIC DEVELOPMENT AND BASIC SERVICES	52,045,121	17	40,573,177	30	11,471,943	87
(3) *Miscellaneous*						
Administration and Supervision	3,131,813	58	3,131,813	58	—	
Stores (Unallocated)	1,091,935	41	1,091,935	41	—	
TOTAL—MISCELLANEOUS	4,223,748	99	4,223,748	99	—	
GRAND TOTAL ...	84,472,112	10	67,507,168	23	16,964,943	87

APPENDIX II

STATEMENT OF DEVELOPMENT AND WELFARE EXPENDITURE FOR THE PERIOD JULY 1, 1946, TO JUNE 30, 1955

Actual Expenditure 1946—55

Head	*Expenditure 1946–55*		*Sources of Finance*					
			C.D. & W.		*Local*		*Loan*	
	Rs	c	Rs	c	Rs	c	Rs	c
1. Administration ...	4,548,145	89	253,705	59	4,294,440	30	—	
2. Agriculture	4,611,010	59	123,300	70	3,985,744	95	501,964	94
3. Education	1,065,711	22	—		1,065,711	22	—	
4. Health	5,892,279	09	5,000,000		892,279	09	—	
5. Nutrition ...	260,608	99	30,262	75	230,346	24	—	
6 Settlement	929,031	66	736,603	64	136,602	91	55,825	11
7. Irrigation and Water supplies	28,817,837	86	10,576,344	55	—		18,241,493	31
8. Buildings	9,403,439	28	2,927,059	44	119,204	26	6,357,175	58
9. Roads	3,326,185	19	—		—		3,326,185	19
10. Research	7,262,424	19	2,065,695	71	5,196,728	48	—	
11. Sugar Industry ...	5,728,908	00	—		5,728,908	00	—	
12. Interest Charges ...	—		—		—		—	
13. Scholarships and Training Grants	79,279	83	44,241	53	35,038	30	—	
14. Sewerage	596,905	05	—		13,000	00	583,905	05
15. Secondary Industries ...	5,282,703	64	—		10,000	00	5,272,703	64
16. Forestry	1,221,499	33	528,856	35	—		692,642	98
17. Housing	4,893,000	00	—		—		4,893,000	00
18. Agricultural Development	78,661	73	—		—		78,661	73
19. Rodrigues	474,480	56	—		359,604	04	114,876	52
TOTAL ...	84,472,112	10	22,286,070	26	22,067,607	79	40,118,434	05